Commissioning the couplers on module test stands and Linac

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X-FEL coupler meeting, Nov. 25th - 26th, 2003

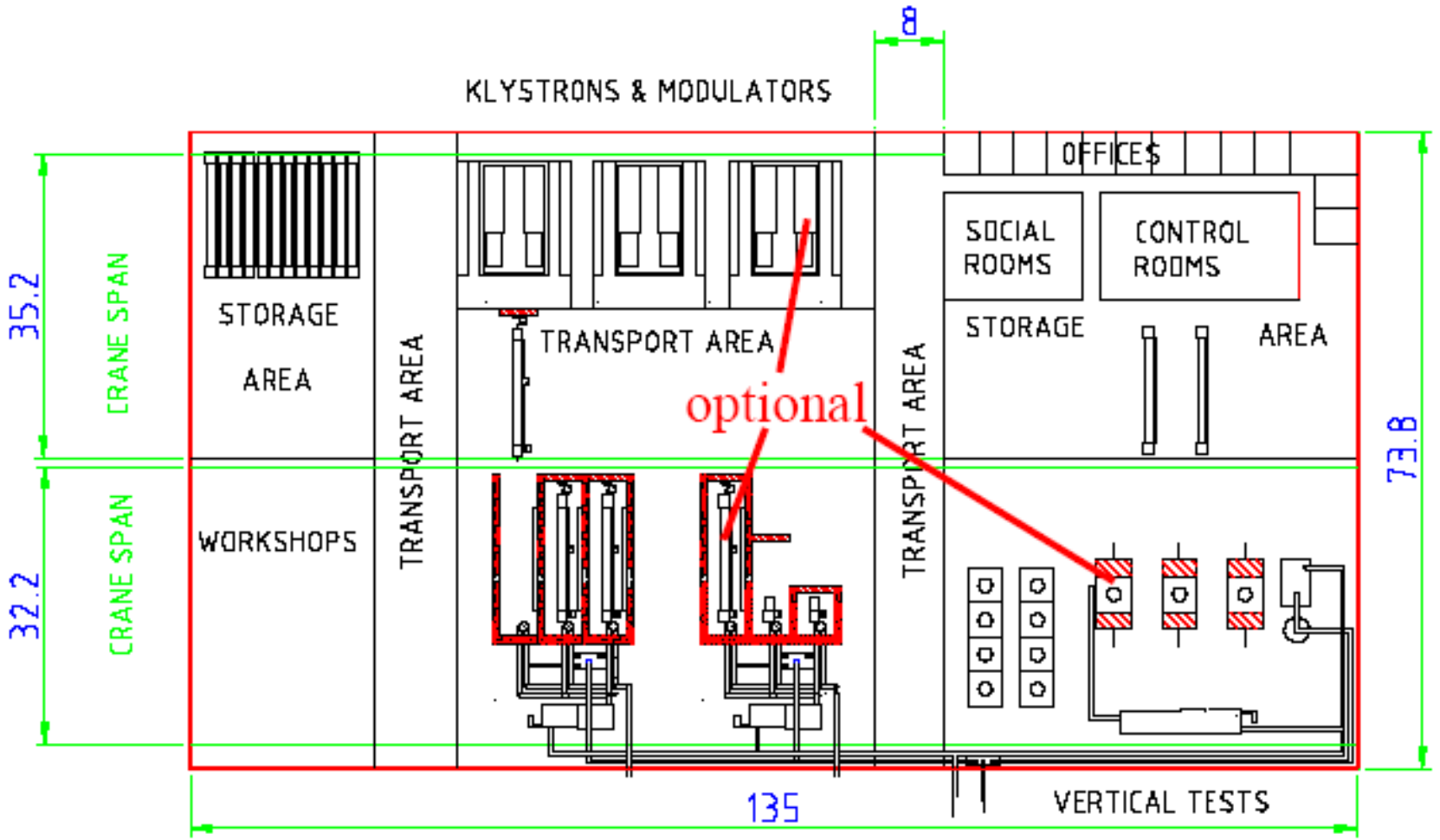
Cryomodule Test Schedule (B. Petersen)

- Test of one cryomodule: 14 d
- Production rate: 1/ week
- -> 3 (+ 1) Test Benches
- 100% Test of all cryomodules

RF components

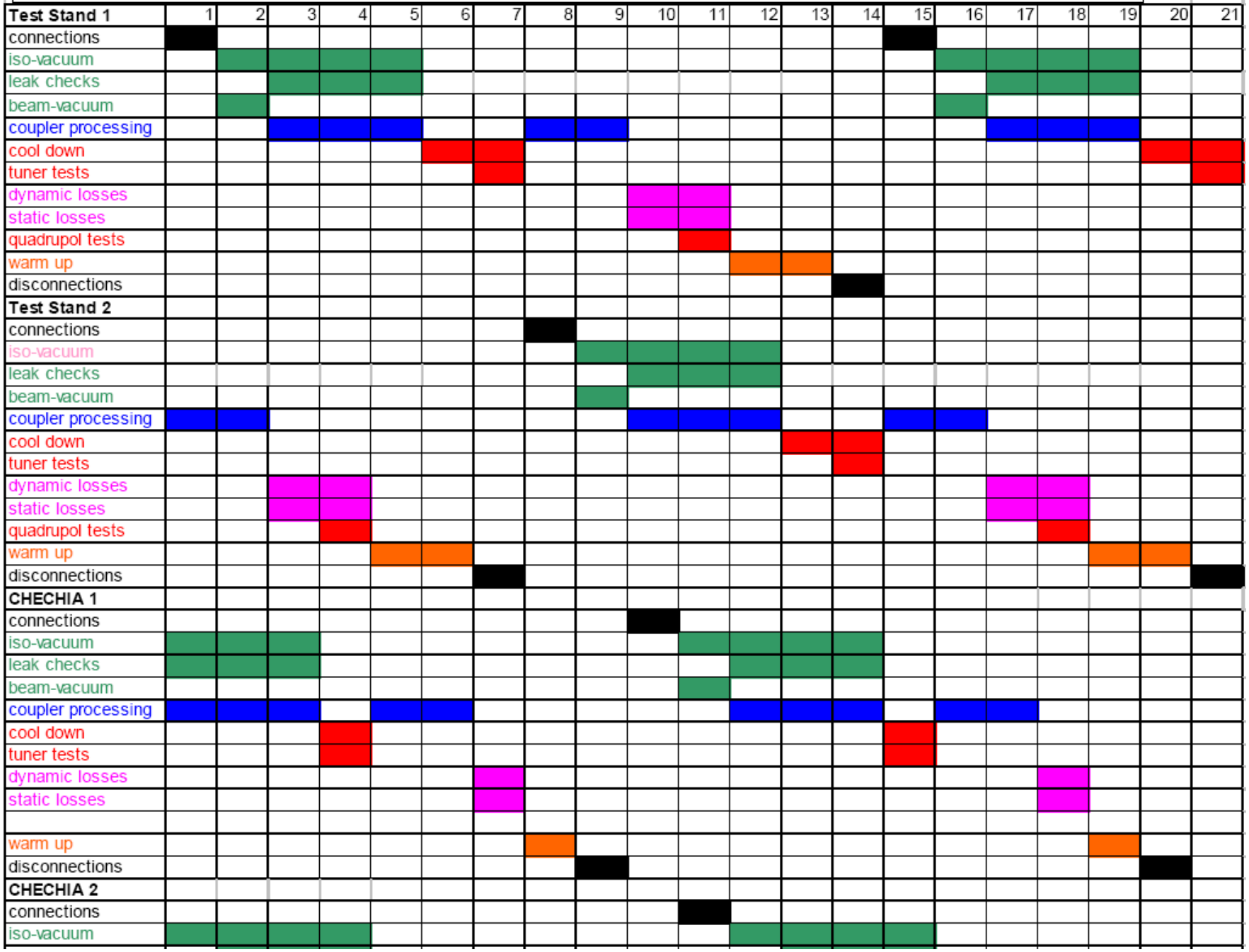
- 5+1 10MV Klystrons & Modulators
- wave guide distribution / circulators for 3+1 module test benches and 2 horizontal test cryostats
- 350 KW/ coupler
- Match distribution for HPP processing ! -> 1MW

Test hall layout



ACCELERATOR MODULE TEST SCHEDULE based on Single Module Tests

Status: 23.10.2003 B.Petersen -DESY -MKS-



The need for longer processing times

- there are 5 days foreseen in B. P. plan (7 days if we would process during cool down)
- processing time for modules 4&5 was 41 days
  - this is a factor of 6!
- a module test would take 50 days
  - we need 10 test stands including klystrons & modulators instead of 4

processing in the linac tunnel

- warm processing could be done as soon as the klystrons are available
- parallel to the installation of other modules (if klystrons have a sufficient shielding)
- processing of all couplers & cavities after cool down is negligible compared to the commissioning of the linac